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L13 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2004:253129 CAPLUS  
 DOCUMENT NUMBER: 140:272686  
 TITLE: Process for the preparation of conjugated linoleic acid from glyceridic oils  
 INVENTOR(S): Saebo, Asgeir; Saebo, Per Christian  
 PATENT ASSIGNEE(S): Natural Asa, Norway  
 SOURCE: U.S. Pat. Appl. Publ., 12 pp.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE       |
|---|------|----------|-----------------|------------|
| US 2004058998   | A1   | 20040325 | US 2002-253216  | 20020924   |
| US 6743931  | B2   | 20040601 |                 |            |
| CA 2499138  | AA   | 20040408 | CA 2003-2499138 | 20030924   |
| WO 2004029186   | A2   | 20040408 | WO 2003-IB4897  | 20030924   |
| WO 2004029186   | A3   | 20040805 |                 |            |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |      |          |                 |            |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |            |
| EP 1546295  | A2   | 20050629 | EP 2003-758523  | 20030924   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK   |      |          |                 |            |
| US 2004225142   | A1   | 20041111 | US 2004-858158  | 20040601   |
| NO 2005001989   | A    | 20050422 | NO 2005-1989    | 20050422   |
| PRIORITY APPLN. INFO.:  |      |          | US 2002-253216  | A 20020924 |
|   |      |          | WO 2003-IB4897  | W 20030924 |

AB The present invention relates to the manuf. of conjugated linoleic acid which utilize alcoholate catalysts and esters of sunflower oil, safflower oil, or corn oil as the source of linoleic acid. Furthermore, the esters can be converted into free fatty acids by sapon. and acidification.

L13 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2006 ACS on STN  
 ACCESSION NUMBER: 2001:417113 CAPLUS  
 DOCUMENT NUMBER: 135:34600  
 TITLE: Method for commercial preparation of conjugated linoleic acid  
 INVENTOR(S): Reaney, Martin J. T.; Liu, Ya-Dong; Westcott, Neil D.  
 PATENT ASSIGNEE(S): Her Majesty In Right of Canada as Represented by the Minister of Agriculture, Can.  
 SOURCE: PCT Int. Appl., 23 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO. | DATE     |
|---------------|------|----------|-----------------|----------|
| WO 2001040419 | A2   | 20010607 | WO 2000-CA1308  | 20001108 |

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WO 2001040419

A3 20011004

W: CA

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE, TR

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B1 20020716

US 1999-451710

19991201

CA 2393403

AA 20010607

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US 1999-451710

A 19991201

WO 2000-CA1308

W 20001108

AB Simultaneous sapon. and quant. **isomerization** of glyceride oils contg. interrupted double bond systems, with alkali in H<sub>2</sub>O yields soaps with conjugated double bonds. Novel methods of hydrolysis of the soap product with acid to form fatty acid-H<sub>2</sub>O emulsions and the breaking of those emulsions are also disclosed. A vegetable oil rich in linoleic acid such as sunflower or safflower oil, KOH, phosphoric acid to neutralize the soaps, and an emulsion breaking compd., e.g. EtOH or other monohydric alc., tannins (either hydrolyzable or condensed tannin) or polyethylene glycol, are the preferred reactants/reagents. The reaction forms positional and geometric isomers of conjugated linoleic acid and the preferred isomer mixt. is controlled by a combination of agitation, precisely controlled heating and rapid initiation and termination of the reaction. The reaction product compn. may be enriched by crystn.